

Experience

4 years+

Rutgers University

Sep 2024 – Present

Graduate Research Assistant

- Analyzing optimized coresets for archetypal analysis to compute approximate convex hulls and evaluating the efficiency of training and retraining of machine learning algorithms. [GitHub]

Teaching Assistant – CS344 Design and Analysis of Algorithms

- Grading homework, projects, quizzes, exams, and other assignments.
- Providing constructive feedback to students on their work.
- Taking recitation lectures for clearing doubts and aiding students with problem solving.

Deutsche Bank

Associate Analyst

- Performed data analysis of over **600K** loss-making events and applied **clustering algorithms (K-Means, DBSCAN)** and **NLP algorithms (TF-IDF, BERT model)** to identify root causes and correlation among loss making events data and their linkages which helped the business to reduce investigation time by **30%**.
- Developed and deployed a **predictive dashboard** which improved data retrieval efficiency by **40%** in high volume production environment for business users and enabled a holistic view of Permitted Products within the organization, through **SQL query plan optimization** and implementing **indices in Elasticsearch and Logstash pipeline**.
- Developed and deployed a **new data model schema** for a third-party data producer (OPUS & CCO) and performed **data back-population** by executing multiple **SQL & Python scripts** to maintain data consistency across **100K** records. [Biggest Team Delivery - 2024].
- Led end-to-end design and development of Criteria-Driven Approvals and Condition-Driven Products by implementing advanced **JPA Criteria API queries** and creating a highly **interactive and responsive UI dashboard using ReactJS**, improving overall response time by **50%**. [Biggest Team Delivery - 2023].

IBM

Software Engineer Intern

- Successfully integrated Apple’s social login identity feature, “**Sign in with Apple REST API 1.0**”, into the **IBM Cloud Identity Connect** software.
- Developed comprehensive **unit tests for the Health Check API**, ensuring reliable performance across various microservices within the IBM Cloud Identity Connect platform and generated detailed **code coverage reports** to identify untested code paths and improve overall test coverage.

Core Skills

Frameworks	Numpy, Scipy, Gurobi, Pandas, Matplotlib, Tensorflow, PyTorch, Scikit-learn, Apache Spark, Jupyter, IPython	Languages	Python, C++ , R, Scala, Java, Typescript
Technologies	Microservices, Exploratory Data Analysis, OAuth, Veracode, LDAP	Database	Oracle SQL, MongoDB
		Cloud	GCP, GKE
		OS	Debian, Ubuntu, Windows, Docker
		Tools	Git, Neovim, Latex, Microsoft Excel

Education

Master of Science, Computer Engineering

Jul 2024 – Present

Rutgers University - New Brunswick

Relevant Coursework: Deep Learning, Convex Optimization, Machine Learning for Engineers

Master of Science, Statistics

Jul 2024 – Present

Rutgers University - New Brunswick

Relevant Coursework: Applied Multivariate Analysis, Statistical Inference, Linear Regression Analysis, Methods and Theory of Probability

Bachelor of Engineering, Computer Science

B.I.T.S Pilani University, India

Relevant Coursework:Data Structure and Algorithms, Design and Analysis of Algorithms, Discrete Mathematics, Software Architecture

Academic Projects

- Object Localization in Image | Python, Keras, Pandas, Matplotlib, Numpy, Pillow | [GitHub]
- Creating a Linked-Data enabled smart client | Python, Flask, FastAPI, Docker, Redis | [GitHub]
- Reinforcement Learning Model for solving CartPole-v1 problem | Python, Tensorflow, Numpy, Matplotlib, OpenAI Gym | [GitHub]

Awards/Achievements

- DB Recognition Award – For exemplary performance and great contribution in a quarter.
- Recognized in RFT Success Story for Biggest Team Delivery 2024 and 2023.
- Ranked 58 in level 3 among 6000 teams in Flipkart GRiD – Te[a]ch The Machines — 2019
- Scored 370/450 (Top 0.22%) in BITSAT (Indian National Level Entrance Examination)